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10/773,571	02/06/2004	Martin E. Thiede	1088.154US02	3554
24113 7590 07/09/2008 PATTERSON, THUENTE, SKAAR & CHRISTENSEN, P.A. 4800 IDS CENTER 80 SOUTH 8TH STREET MINNEAPOLIS, MN 55402-2100				
EXAMINER				
KWIKTNSKL RYAND				
ART UNIT		PAPER NUMBER		
3635				
NOTIFICATION DATE		DELIVERY MODE		
07/09/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Office Action Summary

Application No.

10/773,571

Applicant(s)

THIEDE, MARTIN E.

Examiner

RYAN D. KWIECINSKI

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3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2007.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-28 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-11 and 13-28 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 06 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claims 13 and 14 are objected to because of the following informalities:

Claims 13 and 14 are dependent from canceled claim 12, it appears they should depend from claim 1. Claims have been examined as if they are dependent from claim 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5, lines 2-3, it is unclear what is meant by “adapted to a portion of an attachment bracket”. The extension is adapted to do what with a portion of an attachment bracket?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 15, 19, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by US Re. 33,220 to Collier.

Claims 1, 5, 15, 19, and 26:

Collier discloses a method of assembling a modular floor and the modular floor comprising:

providing at least two main beams (152 and 170 and 152, Fig.2), wherein each beam has an attachment structure, wherein the attachment structure comprises a first support section (left vertical leg, Fig.2), a second support section (right vertical leg) and a channel (channel between the two legs) that extends between the first and second support sections;

attaching the at least two main beams with at least one cross beam (152 to the left, Fig.2; form a grid as in Fig.1) to retain the main beams in a substantially stationary relationship with respect to each other;

attaching at least one leg (10, Fig.2) to the main beam;

attaching a floor panel (162) to upper surfaces of the first and second sections, wherein ends of the floor panel include recesses (recess under the top panel) formed therein that are shaped substantially complimentary to the upper surfaces of the first and second sections;

wherein each of the main beams has at least one side wall that includes at least one extension (142 on the left), wherein cross beam is attached to the main beams with an attachment bracket (146, Fig.2) that engages the at least one extension.

Claims 1-2, 9, 15-16, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,676,036 to Bessert.

Claims 1-2, 9, 15-16, and 23:

Bessert discloses a method of assembling a modular floor and the modular floor comprising:

providing at least two main beams (26, 28 and another 26, 28 opposite forming the grid, Fig.2 and 3), wherein each beam has an attachment structure, wherein the attachment structure comprises a first support section (262a, Fig.3), a second support section (262c) and a channel (262b) that extends between the first and second support sections;

attaching the at least two main beams with at least one cross beam (the beams between parallel 26 beams in Fig.2) to retain the main beams in a substantially stationary relationship with respect to each other;

attaching at least one leg (17) to the main beam;

attaching a floor panel (29) to upper surfaces of the first and second sections, wherein ends of the floor panel include recesses formed therein that are shaped

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substantially complimentary to the upper surfaces of the first and second sections (sit on the connection structures);

wherein the first and second support sections define a convex upper surface (a line connecting the tips of the support sections will form a convex curve, Fig.3);

further comprising a locking mechanism (36a) that releasably attaches the floor panel to one of the main beams.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Re. 33,220 to Collier to US 6,871,454 B2 to Coday Sr. et al.

Claims 7 and 21:

Collier discloses the modular floor of claims 1 and 15, but does not disclose wherein the cross beam includes a main section and end sections that are attached to opposite ends of the main section.

Coday Sr. et al. discloses wherein the cross beam includes a main section (224, Fig.1) and end sections (230 and 232) that are attached to opposite ends of the main section.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the cross beams with a main section and two end sections in order to provide the proper connection between the main beams and the cross beams. The end sections will allow the cross beams to connect to the main beams using stable connections and possibly interchangeable connections.

Claims 3-4 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Re. 33,220 to Collier to US 6,871,454 B2 to Coday Sr. et al. in view of US 4,503,651 to Pugh.

Claims 3-4 and 17-18:

Collier discloses the modular floor of claims 1 and 15, wherein each of the main beams has a first end and a second end (170 and opposite end of 170, Fig.2), but does not disclose wherein a bolt is attached to the main beam proximate the first end, and wherein the second end has a locking mechanism, nor does he disclose wherein the locking mechanism comprises a recess that is adapted to receive a bolt and a locking tooth assembly, wherein the locking tooth assembly is movable between a locking position and an unlocking position, and wherein the bolt is retained in the recess when the locking tooth assembly is in the locking position.

Coday Sr. et al. disclose wherein a bolt (222, Fig.10) is attached to the main beam proximate the first end.

Pugh discloses wherein the second end has a locking mechanism (25, 26, Fig.1), wherein the locking mechanism comprises a recess that is adapted to receive a bolt (28, Fig.1) and a locking tooth assembly (26, Fig.1), wherein the locking tooth assembly is movable between a locking position and an unlocking position (open when bolt is slid into the recess), and wherein the bolt is retained in the recess when the locking tooth assembly is in the locking position.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the end connections of the main beams with a bolt and lock connection in order to reduce assembly time of the modular floor of Collier. The bolt and lock connection also eliminates the need for tools during the assembly process and creates a sturdy, easy to assembly connection for the beams of the floor.

Claims 8 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Re. 33,220 to Collier to US 3,180,460 to Liskey, Jr.

Claims 8 and 22:

Collier discloses the modular floor of claims 1 and 15, wherein the floor panel comprises a floor board (flat upper surface of the panel); but does not disclose floor end beams attached to a lower surface of the floor board proximate the ends; and a floor side beam extending between the floor end beams.

Liskey Jr. discloses floor end beams (26, Fig.1) attached to a lower surface of the floor board (32) proximate the ends; and a floor side beam (25) extending between the floor end beams.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed floor panels of Collier with reinforcing end beams and a side beam extending between the end beams. The additional of the end and side beams greatly increases the structural strength of the floor boards and allows more weight to be supported on top of the floor boards. The end and side beams also provide for more structure in which the floor boards can be connected to the end/cross beams.

Claims 13-14 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Re. 33,220 to Collier to US 2,479,962 to Paulson.

Claims 13-14 and 27-28:

Collier discloses the modular floor of claims 1 and 15, but does not disclose a main beam stabilizer and a cross beam stabilizer extending from the main beam to the leg and the cross beam and the leg respectively.

Paulson discloses a main beam stabilizer (56, Fig.9) and a cross beam stabilizer (55, Fig.10) extending from the main beam to the leg and the cross beam and the leg.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the modular floor of Collier with main beam and

cross beam stabilizers in order to increase the structural strength of the completed modular floor assembly. The stabilizers will reduce the movement from shear forces on the modular floor and will also keep the floor in its desired shape and form.

Claims 10-11 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,676,036 to Bessert in view of US 2003/0051420 A1 to Leon.

Claims 10-11 and 24-25:

Bessert discloses the modular floor and method of claims 9 and 23, the locking mechanism engages sides of the channel (364, Fig.3), or wherein the locking mechanism is operably attached to the floor panel so that the locking mechanism is operable from an upper surface of the floor panel (installed on top of the floor panels).

Leon discloses wherein the locking mechanism threadably (fasteners, Fig.1) engages the underlying supports.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the locking mechanism of the floor boards with threaded engaging surfaces. The use of threaded locking mechanisms is notoriously well known in the art. The use of threaded locking mechanisms such as screw or bolt devices would allow any user to properly install and remove the floor boards of the modular floor.

Response to Arguments

Applicant's arguments with respect to claims 1-11 and 13-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN D. KWIECINSKI whose telephone number is (571)272-5160. The examiner can normally be reached on Monday - Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Canfield can be reached on (571)272-6840. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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RDK

/Ryan D Kwiecinski/
Examiner, Art Unit 3635

/Robert J Canfield/
Supervisory Patent Examiner, Art Unit 3635